Please add new claims 11-27 as follows:

B2

11. (New) A lithium secondary battery according to Claim 1, wherein said lithium transition metal compound is selected from the group consisting of $LiNi_{0.005}Ti_{0.005}Mn_{1.99}O_4$, $LiNi_{0.05}Ti_{0.05}Mn_{1.90}O_4$, $LiNi_{0.075}Ti_{0.075}Mn_{1.85}O_4$, $LiNi_{0.15}Ti_{0.15}Mn_{1.70}O_4$, and $LiNi_{0.25}Ti_{0.25}Mn_{1.50}O_4$.

12. (New) A lithium secondary battery according to Claim 1, wherein said lithium transition metal compound further comprises Mg as an additional element.

13. (New) A lithium secondary battery according to Claim 1, wherein said lithium transition metal compound further comprises Li as an additional element.

14. (New) A lithium secondary battery according to Claim 13, wherein said lithium transition metal compound further comprises Mg as an additional element.

15. (New) The lithium secondary battery of Claim 1, wherein the average ionic radius of the substitution members is within ± 15 percent of the ionic radius of Mn.

16. (New) The lithium secondary battery of Claim 1, wherein a portion of Mn is substituted further by at least one of B, Al, Co, and Cr.

17. (New) The lithium secondary battery according to Claim 1, wherein the lithium transition metal compound is composed by firing a mixed compound comprising salts and/or oxides having been prepared with a predetermined ratio in the presence of oxygen within a temperature range of 600°C to 1000°C for 5 hours to 50 hours.

18. (New) The lithium secondary battery according to Claim 17, wherein the lithium transition metal compound has been synthesized and obtained by conducting at least first and second firing steps, with the firing temperature of the second step being higher than that of the first step.

19. (New) A lithium secondary battery comprising a positive active material including a lithium transition metal compound, said compound being represented by the formula $Li(Mg_{X1}Ti_{X2})_ZMn_{2-Z}O_4$ wherein z is 0.01 to 0.5, $X_1 > 0$, $X_2 > 0$, X1+X2=1, and said positive active material has a spinel configuration of the cubic system.

20. (New) A lithium secondary battery according to Claim 19, wherein said lithium transition metal compound is selected from the group consisting of $LiMg_{0.005}Ti_{0.005}Mn_{1.99}O_4$, $LiMg_{0.05}Ti_{0.05}Mn_{1.90}O_4$, $LiMg_{0.075}Ti_{0.075}Mn_{1.85}O_4$, $LiMg_{0.15}Ti_{0.15}Mn_{1.70}O_4$, and $LiMg_{0.25}Ti_{0.25}Mn_{1.50}O_4$.

21. (New) A lithium secondary battery according to Claim 19, wherein said lithium transition metal compound further comprises Ni as an additional element.

B2

22. (New) A lithium secondary battery according to Claim 19, wherein said lithium transition metal compound further comprises Li as an additional element.

23. (New) A lithium secondary battery according to Claim 22, wherein said lithium transition metal compound further comprises Ni as an additional element.

24. (New) The lithium secondary battery of Claim 19, wherein the average ionic radius of the substitution members is within ± 15 percent of the ionic radius of Mn.

25. (New) The lithium secondary battery of Claim 19, wherein a portion of Mn is substituted further by at least one of B, Al, Co, and Cr.

26. (New) The lithium secondary battery according to Claim 19, wherein the lithium transition metal compound is composed by firing a mixed compound comprising salts and/or oxides having been prepared with a predetermined ratio in the presence of oxygen within a temperature range of 600°C to 1000°C for 5 hours to 50 hours.

27. (New) The lithium secondary battery according to Claim 26, wherein the lithium transition metal compound has been synthesized and obtained by conducting at least first and second firing steps, with the firing temperature of the second step being higher than that of the first step.

In the Abstract:

Please rewrite the abstract as follows:

Abstract of the Disclosure

A lithium secondary battery has small internal resistance and has good charge-discharge cycle characteristics, with a lithium transition metal compound being used as a positive active material. A portion of transition element Me in a lithium transition metal compound $LiMe_XO_Y$ to be used as a positive active material is substituted by not less than two substitution elements M selected from the group consisting of Li, Fe, Mn, Ni, Mg, Zn, B, Al, Co, Cr, Si, Ti, Sn, P, V, Sb, Nb, Ta, Mo, and W, to provide $LiM_ZMe_{X-Z}O_Y$, wherein $M \neq Me$.